



BoP Rules Version 10

Document Amendment Table		
Description, location	Date varied	Web Published
Previous versions of this file are located within the adjacent Obsolete folder		
Upgraded BOP baseline and limits , varied Rules point 16) and deleted 16) and deleted 16) e). Added 5 d) FRW.	4/4/2024	3/6/2024
Issue #1 Natsoft Results as published will determine the Top 5 finishers, and competitors may elect where to apply BoP increments as earned	10/6/2024	

Refer also to the separate documents:

Australian Prototype Series Sporting Regulations - Version *

APS - BoP - an Introduction V*

APS - BOP for Performance Parity and Control V*

APS – BOP Calculator

An Introduction

This document is intended to describe the rules for the control of the implementation of balance of performance (BoP) to achieve Performance Parity within the Australian Prototype Series (APS).

BOP will be applied to the vehicle as an automobile and driver combination, based on the results and performance of that combination.

BoP is described in APS Sporting Regulations and Documentation as published, and as published and Regulated by Motorsport Australia, and penalties may be applied for non-compliance.

BOP baseline and limits

The application of BOP to the vehicle will occur by varying a range of parameters of the vehicle.

The forms of control of BoP that can be Nominated by the Competitor are:

- 1) Engine forced air induction Restriction: Boost Pressure Restriction (BPR)
- 2) Throttle Opening Restriction (TPR)
- 3) Minimum Race Weight using ballast (MRW)
- 4) Maximum Engine RPM (MER)

Additionally, APS has a performance parity system that complements the Nominated BoP system; as described within the document "APS - BOP for Performance Parity and Control V*". APS may require the Competitor to maintain the Finishing Race Weight (FRW) within a specified weight range.

The competitor will be required to nominate the 2 most suitable forms of BOP for their vehicle.

BoP Baseline levels will be either advised by the Competitor, or will be applied by APS, and then varied according to lap time performance as outright and relative to other vehicles.

Where BoP is to be applied, it must be applied to the required level prior or during any event for the ensuing competitive sessions.

Specifically, the competitor must be able to

1. vary and control the level of BoP before and during any Event,
2. provide a tool that will measure the level of application of required BoP
3. be able to utilize that tool so as to verify Compliance to the satisfaction of an inspecting Official.

Baseline BOP is that degree of BOP that the APS as Category Manager of the Series deems is appropriate for that Vehicle and Driver combination as a starting point.

Prior to commencement of racing for a season for each such car and driver combination, for that first event, APS will set the baseline degree of initial BOP.

BoP Rules

- 1) BoP will be set and published using the BoP Sheet prior to an event, and BoP may be varied during a Race Meeting.
- 2) Where BoP has not been set by APS Officials, only competition event results will be used to determine if a BoP change is necessary for an individual competitor/driver/automobile combination (i.e. results and outcomes of qualifying and race sessions only).
- 3) BoP shall be calculated using the competitive session results of all APS participants as published by Natsoft, and individually applied to all automobiles in the event without consideration of Class.
- 4) For the rapid determination of BoP for the next session, the results of the most recent Competitive Session as published by Natsoft immediately after the conclusion of that session as Issue #1 Provisional Results will be utilised to determine the application and degree of BoP. Such results as published may include the outcomes of penalties as imposed by Officials prior to the commencement of that most recent competitive session, and may also include the outcomes of penalties as awarded during the competitive session, where these penalties may or may not be noted in the Natsoft results as published.
 - a) The Fastest Lap time of each vehicle as published by Natsoft will be utilised.
 - b) The Position of the first 5 vehicles in the Finishing Order as published by Natsoft will be utilised.
- 5) For each session, the determination BoP as above shall not be affected if and when the Officials of the event may decide after the competitive session to penalise Drivers for unsatisfactory conduct such that Race Results may be then varied from the Natsoft finishing order as initially published.
- 6) For Qualifying, only the fastest lap time of each automobile will be utilised to calculate BoP.
- 7) For Races, fastest lap time and finishing position and session-Finishing Racing Weight (FRW) will be utilised to calculate BoP application and variation.
 - a) For each qualifying session and for races, the Median Lap Time (MLT) is calculated by the average of the average fastest lap time of all race Finishers.
 - b) The MLT will be calculated by the CM using fastest lap times from the Preliminary Race Results as published by Natsoft and is not subject to protest or appeal. The MLT calculation will be made available by the CM at the request of any Competitor.
 - c) NOTE: Only lap times within 110% of the fastest lap time will be used for the MLT calculation

- d) Finishing Race Weight (FRW) will be measured at the conclusion of a Race. Where an increment of a nominated form of BoP has been earned, the FRW system will then be applied so as to set the future target FRW (with allowable tolerance) for that vehicle. Compliance with such FRW will be required at the next competitive session and will carry forward until varied.
- 8) A *MLT* will not be calculated for BoP calculations, and session-Finishing Racing Weight (FRW) will not be assessed for compliance and applied, where:
- the *Track* was declared wet by the Clerk of the Course; or
 - less than 75% of the scheduled duration was completed; or
 - more than 60% of the laps completed were under Safety Car conditions.
- 9) For each qualifying session or race, BoP may only be increased for an automobile if:
- The best lap time exceeds the qualification requirement of being faster than (less than) the *MLT*.
 - The automobile finished within the Top 5 positions of race results.
- 10) Automobiles that finish in the top 5 and have a fastest lap which exceeds the Qualification lap time as being faster than the *MLT* will have BoP increased.
- 11) Adding Increments of BoP:
The BoP increase will be calculated, and the additional increments as applied will be proportional to the degree by which the lap time Qualifies as being faster than the *MLT* for the imposition of BoP.
Qualification:
- 1.5 seconds per lap up to but not including 2.0 seconds = application of 1 of increment of BoP
 - 2.0 seconds per lap up to but not including 2.5 seconds = application of 1 of increment of BoP
 - 2.5 seconds per lap up to but not including 3.0 seconds = application of 1 of additional increment of BoP
 - 3.0 seconds per lap up to but not including 3.5 seconds = application of 1 of additional increment of BoP
 - 3.5 seconds per lap up to but not including 4.0 seconds = application of 1 of additional increment of BoP
 - 4.0 seconds per lap up to but not including 4.5 seconds = application of 1 of additional increment of BoP
 - 4.5 seconds per lap up to but not including 5.0 seconds = application of 1 of additional increment of BoP
 - and so on....
 - Thus a fastest lap time that is 3.6 seconds faster than the *MLT* will earn 5 increments of BoP
- 12) Where the BoP system requires that increments of BoP shall be applied, this process shall not be disrupted by the application of the Finishing Racing Weight system.
- 13) Removing Increments of BoP:
Where an automobile has not earned any increments of BoP for 3 consecutive races in which it has been classed as a Finisher and during which BoP was awarded to participants according to the Rules, then the Competitor is qualified to apply to APS Officials to have 1 increment of BoP removed for the next competitive session. The Official may not unreasonably refuse to approve the removal of one increment.
- And, following the same qualification, application and approval process, an additional increment may be removed for each subsequent competitive session until BoP is again earned, or until the Baseline BoP levels are reached.
- 14) Any BoP variation applied to an automobile must be carried over to subsequent competitive sessions and events unless a further increase or decrease is applied.
- 15) Where BoP variation is calculated and required at the conclusion of the last session of an event, this BoP may be applied for the first session of the following race meeting for that competitor/driver of that automobile.
Where a variation in BoP is required for an automobile following the last race at a Round

of the Series, that variation will be applied at the first qualifying session or race at the next Round at which that Automobile/Driver competes.

- 16) If a new Driver commences racing in an existing APS automobile, the BoP reverts back to the baseline BoP for that automobile, unless otherwise determined APS.
- 17) If an existing APS Driver commences racing in a different car, a BoP baseline will be determined by APS.
- 18) Following each qualifying session or race, a variation **in the forms of BoP control as nominated by the Competitor** will not apply to any Automobile that:
 - a) did not participate in that qualifying session; or
 - b) did not start that race (DNS); or
 - c) did not finish that race (DNF); or
 - d) was disqualified from that qualifying session or that race (DSQ)
- 19) **A competitor/driver that earns additional increments of BoP may elect to apply such increments to their nominated Forms of BoP as they wish. For example, multiple increments as earned may be applied to one form of BoP, or another, or may be split between two forms of BoP.**
- 20) If the limits are reached for the 2 forms of BOP nominated by a competitor/driver, the competitor will be required to nominate a third form of BoP to be used to apply further variations to control performance.